

PSYCHOLOGICAL VARIABLES IN BATTERED WOMEN'S STAY/LEAVE  
DECISIONS: RISK-TAKING, PERCEIVED CONTROL, AND OPTIMISTIC BIAS

Vanessa A. Handsel

A Thesis Submitted to the  
University of North Carolina Wilmington in Partial Fulfillment  
Of the Requirements for the Degree of  
Master of Arts

Department of Psychology  
University of North Carolina Wilmington

2007

Approved by

Advisory Committee

---

Chair

Accepted by

---

Dean, Graduate School

## TABLE OF CONTENTS

ABSTRACT .....	iii
ACKNOWLEDGMENTS .....	iv
DEDICATION .....	v
LIST OF TABLES .....	vi
INTRODUCTION .....	7
Risk-taking Behavior .....	12
Perceived Control.....	15
Intermittent Relationship Reinforcement.....	17
Optimistic Bias.....	18
Rationale .....	20
Hypotheses .....	20
METHOD .....	21
Participants.....	21
Measures .....	21
Procedure .....	24
RESULTS .....	24
Descriptive Statistics.....	25
Analysis.....	28
DISCUSSION .....	35
Limitations .....	41
Summary and Conclusions .....	43
REFERENCES .....	44

## ABSTRACT

An experiment was conducted to assess the roles that risk-taking behavior, perceived control, optimistic bias, and intermittent relationship reinforcement play in determining the likelihood that a victim will return to or remain with her abuser. Surveys were administered to 71 battered women receiving services at various domestic violence shelters in North Carolina. Participants were divided into two groups based on their odds of return, resulting in one group with a less than 50 percent chance of leaving (will return) and a second group with an above 50 percent chance of leaving (will not return). The return criterion was measured and analyzed in terms of the aforementioned variables. While no one variable predicted the criterion, in the group more likely to return, greater perceived risk of unsafe sexual activity and higher perceived control over future events predicted increased likelihood of return to abuser. Within the group indicating they would probably not return, higher perceived benefits of risky sexual behavior predicted an increased likelihood of return as compared to others in that group. Findings suggest that risk-taking and perceived control are significant indicators of return for women who admit they will go back to their abusive partner, while perceived risk of unsafe sexual behavior and higher perceived control can help identify those within the group of who say they are not going back. This highlights the need for a multi-pronged approach to dealing with the issue of domestic violence.

## ACKNOWLEDGMENTS

My undying gratitude is owed to Dr. Caroline Clements for her stellar mentorship, support, and guidance in this process. Under her aegis I have been transformed from student to scholar and have made a lifelong friend along the way. I would also like to thank the members of my thesis committee, Dr. Richard Ogle and Dr. William Overman, for their dedication, patience, and expertise.

Boundless thanks is due to Dr. Judy Kinney for statistical and emotional support. Her sense of humor and intelligence has made my time under her tutelage rewarding beyond all measure. I am also forever indebted to Rosemary Schmitt who is nothing less than my guardian angel, mom away from moms, and patron saint of graduate students. To my academic sisters and partners in crime Claire Oxtoby, Jill Cowan, and Erica Knowles I owe thanks for endless hours of laughter, insight, and support. Your friendship has been invaluable and indelible. Thank you for being who you are.

I would also like to thank the undergraduates in Dr. Clements' DIS lab for data collection, as well as Sonya Kelly and Peggy Roggenstein for making sure everything ran smoothly. I am so grateful to the domestic violence shelters participating in this study, their staffs, and the women they serve. Their willingness to participate and share their experiences means the world to me and through doing so they have given a voice to the many women who suffer from the problem of domestic violence. Finally, I must thank my family and James Bryant for the years of steadfast love and inspiration that have made me who I am today.

## DEDICATION

This work is dedicated to my parents, Lee and J.P., whose infinite love and guidance have made everything possible. They taught me not only the importance of achieving my goals but also gave me the tools to do so, a gift for which I will be forever grateful.

## LIST OF TABLES

Table	Page
1. Descriptive Statistics for Continuous Demographic Variables.....	27
2. Descriptive Statistics for Categorical Demographic Variables.....	28
3. Group 1 Correlations: RT, PC, OB, and IRR.....	33
4. Group 2 Correlations: RT, PC, OB, and IRR.....	34
5. Group 1: Summary of Regression Analyses.....	35
6. Group 2: Summary of Regression Analyses.....	35

## INTRODUCTION

Domestic violence continues to be a serious social problem. In 2005, the National Domestic Violence Hotline reported a 15% increase in demand for family violence services as compared to the previous year, and a 134% increase in the amount of calls the center received since it began offering services ([www.ndvh.org](http://www.ndvh.org)). According to the US Department of Justice (USDJO), in 2002 females accounted for 76% of interpersonal violence victims (Fox & Zawitz, 2004). The National Crime Victimization Survey found that 85% of IPV victims were female (Rennison, 2003). In fact, intimate partner violence (IPV) accounts for 20% of all nonfatal violent crime experienced by women and U.S. women aged 18 and older experience 5.3 million instances of intimate partner violence every year (Tjaden & Thoennes, 2000a).

Tjaden & Thoennes reported that IPV is a public health epidemic currently affecting upwards of 32 million Americans (2000a). Intimate partners are responsible for the rapes and physical assaults of approximately 1.5 million women in the United States each year, which results in roughly 47 occurrences of IPV per 1,000 women (Tjaden & Thoennes, 2000a). Despite such high prevalence, many occurrences of IPV are not reported to medical or law enforcement personnel. In a National Violence Against Women Survey by the US Department of Justice, Tjaden and Thoennes (2000a) found that only 20% of IPV sexual victimizations, 25% of physical assaults, and 50% of stalkings are reported. Moreover, battered women typically experience multiple victimizations, resulting in a far higher number of victimizations than recorded victims (Tjaden & Thoennes, 2000a). Therefore, domestic violence statistics may greatly underestimate the severity of the problem.

Intimate partner violence results in approximately 1,300 deaths and 2 million injuries yearly in the United States (CDC, 2003). A woman is more likely to experience injury, rape, or murder at the hands of an intimate partner than anyone else (World Health Organization; WHO, 1997). In 2001, more than 1,200 murders against women were perpetrated by current or former abusers (BJS). The US Department of Justice reported in 2004 that 11% of homicide victims from 1976 to 2002 were the result of IPV and that in 2002 76% of IPV murder victims were women (Fox & Zawitz, 2004). About 37% of women admitted to emergency rooms for violence-related wounds were injured by a current or former abuser (BJS, 1997). In fact, a recent study found that 44% of women killed by an intimate partner had received emergency room services within 2 years of the murder (Crandall, Nathens, Kernic, Holt, & Rivara, 2004). Crandall, et al., (2004) also reported that 93% of those women had been to the emergency room at least once specifically for an IPV injury. Of females who suffered physical assault from the age of 18, 42% sustained injuries during their most recent occurrence of IPV (Tjaden & Thoennes, 2000a).

Costs of IPV are high for the victim and for society. Victims of IPV suffer diverse physical, psychological, social, and economic consequences. Long-term physical ailments linked to abuse include physical disabilities, chronic pelvic and/or back pain, headaches, gastrointestinal problems and unwanted or unhealthy pregnancies (Garimella, Plichta, Houseman, and Garzon, 2000). Emotional and psychological abuse frequently co-occurs with physical abuse (Tjaden & Thoennes, 2000a). Depression, anxiety, panic disorders, suicidality, PTSD, alcohol abuse, and drug abuse are commonly seen psychological problems associated with IPV (Garimella, et al., 2000; Golding, 1999).



The Centers for Disease Control and Prevention reported that IPV against women costs the economy upwards of \$5.8 billion yearly (CDCP; 2003). Roughly \$4.1 billion of that cost was a direct result of mental health and medical care, while nearly \$1.8 billion in cost was the indirect result of lost productivity (CDC, 2003). Overall, IPV victims lose nearly 8 million paid work days, which can be translated into more than 32,000 full-time jobs, as well as about 5.6 million days of yearly household productivity (CDC, 2003). Women in abusive relationships are more likely to have been unemployed in the past, be unhealthy, and be receiving public assistance, as they are often forbidden to attend work or school (Lloyd & Taluc, 1999). The US General Accounting Office (USGAO, 1998) reported that between 55% and 65% of welfare recipients report IPV at some point in their lives. Approximately 60% of employed victims of IPV reported reprimands at their place of employment as a result of abuse related behaviors, while 52% reported job loss (USGAO, 1998). The economic cost of IPV often results in a cyclic problem, as women below the poverty line are at disproportionate risk of victimization. Abusive partners often constrain a woman's income or economic resources, making it difficult for her to leave (Tjaden & Thoennes, 2000b).

One unresolved issue in the domestic violence research area is the fact that many abused women remain with or return to their abusers, even as abuse severity escalates. In fact, with each return, abuse becomes markedly more severe and likely to result in physical or mental trauma for the woman (Walker, 1999). Once a woman has been victimized, her odds of revictimization are high unless preventative measures are taken (Weisel, 2005). On average, abused women attempt to leave their abuser 5 to 7 times before leaving for good (Primezone Media Network, 2005). One meta-analysis found

that nearly 50% of abused women who had sought help for their situation ended up returning to their abusive partner (Strube, 1988).

While problematic in itself, returning to an abuser also elevates a woman's risk of injury or death. Individuals who experience multiple victimizations tend to suffer more serious physical injury than those who experience a single incident of violence (Johnson and Leone, 2005). Thirty-two percent of battered women who return are re-victimized within 6 months (BJS, 1986). In a comparison of international victimization surveys, Weisel (2005) found that domestic violence was consistently the most predictable form of repeated assault. A recent British Crime Survey found that 62% of domestic violence assaults were repeated victimizations (Weisel, 2005). Even more disturbing, 23% of domestic violence assaults are repeat offences in which the woman is assaulted three or more times (Weisel, 2005). The British study also found that 15% of repeated instances of IPV occurred within 24 hours of the initial assault, while 35% reoccurred within 5 weeks. (Weisel, 2005). According to a recent National Violence Against Women (NVAW) survey the average number of physical assaults a female victim experienced by the same intimate partner was 6.9, while over 40% of battered women in that study suffered physical injuries as a result of those assaults (NIJ and CDC, 2000).

Such high rates of return are all the more inexplicable given the widespread negative stereotypes associated with returning to abuser. Women who return to their abusive partners have been labeled as masochistic and held responsible for abuse perpetuation (Dutton & Painter, 1981; Gelles, 1997; Follingstad, 2001; Busch, 2004). Along with masochism, IPV victims who return or remain have been labeled immature, personally inadequate or incomplete, and sexually perverse (Busch, 2004). Busch (2004)

notes that, because or society correctly deems domestic violence in our society to be fundamentally “wrong,” women who remain in abusive relationships are considered to be equally “wrong” and deficient in their values.

Similarly, physicians treating IPV victims may harbor preconceived notions about the causes of abuse. In one study most doctors (97%) reported that they felt it was their duty to help IPV victims but nearly 30% attributed blame for the abuse to the victim (Garimella, Plichta, Houseman, and Garzon, 2000). While recent studies addressing these preconceptions emphasize situational and psychological variables mediating the decision to return or remain with one’s abuser, there is still a need for further study of psychological correlates of return to abuser to address the mechanisms underlying such return.

One reason why few empirical studies assessing such correlates are done is that it is difficult to keep track of battered women after they have left shelter services. Roughly 50% of women living in a domestic violence shelters return to their abuser (Gordon, Burton, and Porter, 2004). While most women leave shelters with safety plans and mechanisms in place not to return to their abusers, research shows that such plans often go awry. The fluidity of living situations typical in abusive scenarios makes it is difficult to follow this cohort. Further complicating research efforts, abused women may not report their living situation accurately because they know that the decision to return is viewed negatively by support systems (Gelles, 1997; Ross & Glisson, 1991).

It is important to recognize that a woman’s decision to remain with her abuser is likely multiply determined. Such determinants include abuse characteristics and personological variables (CDC, 2003; Gelles, 1976). In the extant literature, low

socioeconomic status, abuse history, severity and frequency of abuse, impaired coping, low perceived control, and psychopathology have all been associated with the maintenance of abusive relationships. The most important correlate appears to be low SES which has been associated with increased risk in many studies (Tjaden & Thoennes, 2000b). Threats from the abuser may also have direct affects on return rates. In fact, a woman is most likely to be killed by her abuser in the period right after she leaves (Heise & Garcia-Moreno, 2002). Hence, returning to an abuser may be viewed by victims as a life preserving decision in the short term.

In this study the correlates of a battered woman's decision to remain with or return to an abuser were examined. Although known correlates (e.g. abuse characteristics such as life threat and SES) were assessed, I extended the current literature by assessing the role of risk taking in terms of its impact on a woman's decision to return. Returning to or remaining in abusive situations was, for the purposes of this study, classified as a high-risk behavior. In addition I assessed other variables theoretically tied to risk taking behavior and poor decision making. These variables were perceived control over future abuse, optimistic biases about the abuser, and the intermittently reinforcing nature of the abusive relationship (Clements & Sawhney, 2000; Clements, Oxtoby and Handsel, 2006).

#### Risk-taking Behavior

Risk-taking behavior encapsulates intentional behavior that is either socially undesirable or potentially injurious wherein the outcome of the behavior is highly uncertain (Turner, McClure, Pirozzo, 2002; Rosenbloom, 2003). A review of the literature by Turner, et al., revealed a clear association between heightened chance of sustaining an injury and risk-taking behavior (2004). Typically, the perceived benefits

and pleasurable experiences associated with high-risk behaviors are used to reinforce and perpetuate the behavior, despite the potential for extremely undesirable outcomes (Fromme, Katz, Rivet, 1997; Rosenbloom, 2003).

For the purpose of this study, I classified risk-taking behavior as an unhealthy or irrational type of decision-making, in which an individual chooses to behave in a way that is deleterious to their health due to unrealistic beliefs about the positive outcome of that behavior (McKenna, & Horswill, 2006; Ronay & Kim, 2006). Essentially, returning to one's abuser is a type of risk-taking that stems from a faulty cost-benefit analysis of the situation. For example, Fromme, Katz, and Rivet note that irrational cost-benefit analyses of risk behaviors such as drug use, lack of condom usage, drunk driving, and prostitution all serve to motivate individuals to participate in these activities regardless of consequences such as AIDS or death (1997).

Social exchange theory claims that a battered woman's decision to remain in an abusive relationship is based upon a similar cost-benefit analysis (Gordon, et al., 2004). Following social exchange theory, researchers have posited that battered women realize that leaving their abuser is the beneficial choice. They make the decision to return because they give more weight to the economic, social, and emotional costs of extricating oneself from an abusive situation (Gordon, et al., 2004). Similarly, as noted in Gordon, et al., the investment model of decision making has also been applied to this situation, wherein the victim uses how much she has invested (i.e., time, love, money, children, house, car, social networks, etc.) to justify the decision to maintain the abusive relationship (2004). Using this logic, Follingstad theorizes that victims who remain with their abusive partner may ultimately assess their relationship as being more beneficial

than costly (2001). A woman's commitment to her partner (i.e. how many years she has spent in the relationship) may further make her less likely to leave, as she views this as an investment with a long-term pay off (Strube & Barbour, 1984).

Perceived control has also been studied by cost-benefit analysts in the choice of risk-taking behavior. Previous research has shown that risk-takers are more likely to report higher levels of perceived control over risky events. They also report more enjoyment of extremely risky events over which they felt some control (Fromme, Katz and Rivet, 1997; Rosenbloom, 2003). Victims of IPV may justify their faulty cost-benefit equations by telling themselves that they have some modicum of control over future abusive episodes. In fact Clements and Sawhney (2000) demonstrated that abused women show high expectations for control over future abuse, even though the research literature on re-abuse rates clearly demonstrates that such perceptions are erroneous. These researchers suggest that abused women may return to their abuser because they falsely believe they can influence their abusers behavior in a positive manner.

Supporting this reasoning, individuals who choose to take part in high-risk activities tend to perceive the outcome of those activities as being more positive than non risk-takers (Fromme, et al., 1997). Victims may employ this same thought process by forming optimistic biases about the future of their abusive relationships. Thus, it is likely that the victim bets her future well-being on the amount of time, resources, emotion, and effort she has invested in the relationship, as well as her perceived ability to control abuse in the future. A gamble such as this is classifiable as high-risk behavior because the woman's life often hangs in the balance. In fact, one in ten homicide victims (11%)

accounted for between 1976 and 2002 were murdered at the hands of an intimate partner (Fox and Zawitz, 2004).

There is a large body of literature demonstrating individual differences in risk-taking behavior. Many researchers suggest that these differences are hard-wired and gender-based, as women tend to be less adept at making decisions that will benefit them in the long-term (Reavis & Overman, 2001; Martins, Taveres, Sabbatini da Silva Lobo, Galetti, and Gentil, 2004). Studies show that abused women demonstrate high risk-taking behavior in the context of the abusive relationship, which appears to manifest itself especially in terms of protecting their sexual health (Fonck, Els, Kidula, Achola, and Tremmerman, 2005).

There has been very little research examining whether high risk-taking as a personality variable is associated with the decision to enter or remain in an abusive relationship. In one retrospective study Davis, Combs-Little and Jackson (2002) found that women who reported higher risk-taking behaviors such as risky drug and alcohol use and risky sexual behavior were also much more likely to report a history of interpersonal violence and sexual assault. While causal direction cannot be determined from this analysis, Davis's data would suggest at least a theoretical foundation for the notion that high risk taking is associated with intimate partner violence. The purpose of this study is to take a first step is examining the role of risk taking in the decision to return to one's abuser.

#### Perceived Control

Perceived control is a psychosocial construct defined as the belief that one has the

ability to obtain desired outcomes and avoid undesired outcomes (Alloy & Clements, 1992). A number of researchers have suggested that abused women have low perceived control over abuse and that this low perceived control increases the likelihood that women will return (Umberson, 1998). The logic underlying the low perceived control argument is that women who feel helpless about changing their current abusive circumstances are most likely to remain in those circumstances. Though this notion was not empirically studied until recently, advocates for abused women have focused on low perceived control as the single most important determinant of return to abuser for almost 25 years (Walker, 1989).

In one of the few empirical studies addressing this issue, Umberson, et al., tested the hypothesis that low perceived control is associated with a woman's belief that she is incapable of leaving an abusive situation (1998). Umberson found that low perceived control over abuse mediated the relationship between self-efficacy and the decision to leave an abusive situation, making low perceived control much more detrimental to victims than batterers (Umberson, et al., 1998). Women who exhibited low perceived control over abuse also demonstrated low self-efficacy beliefs about their ability to leave the relationship.

Like Umberson, Clements & Sawhney (2000) found that abused women showed low perceived control over current abuse. In this study, however, abused women reported high perceived control over future abuse, a variable unmeasured in Umberson's study. Clements and Sawhney theorized that such high control expectations reflect a victim's belief they can change their abusive partner's behavior (2000). Unlike Umberson, Clements and Sawhney suggest that it is these high expectations of control



over the future of a relationship that make it more likely for women to remain in an abusive situation, rather than low perceived control over their current situation. Clements did not measure whether women in her sample actually returned to their abusers so the relationship of high perceived control over future abuse and likelihood of returning is as yet undetermined.

### Intermittent Relationship Reinforcement

Intimate partner violence typically is intermittent in nature and occurs unpredictably (Walker, 1989). Also typically, abuse episodes are followed by what Walker (1989) termed “honeymoon periods” during which abusers make amends and appear to change their ways. This “honeymoon period” was first discussed in the Cycle of Violence theory of domestic abuse but is not exclusive to that model (Follingstad, 1988; Janoff-Bulman & Freize, 1983; Walker, 1978).

Clements, Oxtoby and Handsel (2005) theorized that this peaceful period may act as an intermittent reinforcer, helping to maintain the relationship. In their study, women who reported greater intermittent relationship reinforcement also reported greater abuse disability and severity of abusive episodes. However, the fact that these episodes occur so infrequently and erratically allow the victim to write off the abuse as a one-time incidents or isolated cases. During the non-abusive periods, the abuser offers enticements, such as good behavior, gifts, and apologies, all of which serve to reinforce the victim’s decision to stay and elicit her forgiveness (Myers, 1995; Walker, 1979). Similarly, Gordon, Burton, and Porter (2004) found that forgiveness does indeed mediate the relationship between a victim’s attributions about the causes of abuse and her stay-leave decision (2004).

The logic in these analyses is that the stay/leave decision is determined by the intermittent and unpredictable nature of the honeymoon periods that follow abusive episodes (Follingstad, 2001; Snyder & Fruchtman, 1981). The lengthy duration of the honeymoon period is a strong motivator for women to remain with their abuser. Despite the fact that the abuse is incredibly severe when it does occur, the instances of abuse perpetration are brief and inconsistent. The fact that there are far more non-abusive days than abusive ones may lead the victim to believe that each time they are abused is the “last time” or that their abuser may change his or her ways (Follingstad, 1988; Walker, 1978). In this way an abused woman would begin to harbor an optimistic bias about the future of her relationship.

#### Optimistic Bias

One literature rarely applied to the domestic violence arena is optimistic bias research. Optimistic biases are unfounded beliefs about positive outcomes which are unlikely. Helweg-Larsen & Shepperd define it as an individual’s belief that their risk is significantly less than that of others (2001). In general individuals tend to underestimate their risk of experiencing aversive outcomes and overestimate their likelihood of positive outcomes (Price, Pentecost, and Voth, 2002). This results in optimistic biases.

Price, et al., reported that when subjects made a single comparative risk judgment, events that occurred less frequently were associated with greater optimistic bias (2002). This is mirrored in the optimistic biases maintained by abused women who have experienced intermittent relationship reinforcement. Infrequent abuse, while severe in nature, may not occur on a regular enough basis for victims to give up hope that their relationship can be salvaged or that the abuse may one day end. Optimistic biases are

related to the notion of perceived control as well, due to the fact that a person exhibiting an “illusion of control” over an event outcome would also be exhibiting an optimistic bias. The belief that one can change or control an abuser’s behavior in the future contains within it the inherent belief that the outcome of that behavior will be positive. Willingness to take extreme risks can also be conceptualized as a behavior related to heightened optimistic biases because optimism minimizes perceived risk involved in a situation. For example, Dixon assessed variations in gambling decisions and perceived control gambling outcomes (2000). Subjects wagered more chips when they controlled the chip placement, rather than the experimenter, suggesting an illusion of control over the outcome. Similarly, subjects were more likely to overestimate their number of wins when they were in control of the chips and underestimate those of the experimenter when the chips were out of the subjects’ control, indicating that positive outcomes were more reinforcing when participants believed they had some degree of control over them (Dixon, 2000).

While not addressed in the current literature, victims of IPV who maintain high levels of optimistic bias about their abuser may be more likely to remain in abusive relationships, as they do not accurately perceive the risks involved or their ability to control them. Thus, it may be possible that battered women undertake serious health risks by returning to or remaining with their abusers because they harbor optimistic biases about the cessation of abuse. One goal of this study is to assess the role that optimistic biases play in the decision to return to an abuser.

## Rationale

The purpose of this paper is to examine psychological variables associated with increased likelihood of a victim returning to her abuser. The extant literature includes known correlates such as abuse characteristics and low perceived control. Although studied individually these variables have never been examined concurrently in a sample of abused women as they make the decision to return or not. The second purpose of this study is to extend the literature addressing psychological correlates of return by including measures known to be associated with destructive behavior in other milieus. Thus I propose measures of risk-taking behavior, intermittent reinforcement and optimistic biases in addition to measuring known correlates. Integration of these variables may result in a more accurate understanding of the battered woman's decision to remain in abusive relationships and therefore may enable more efficient intervention strategies.

## Hypotheses

Consistent with the current scientific literature assessing battered women and their abusers the following hypotheses are made:

Hypothesis One: Following the rationale that remaining with or returning to one's abuser can be classified as risk taking behavior, it is hypothesized that high scores on risk taking measures will be associated with higher probability of return.

Hypothesis Two: Women who have higher perceived control over future abuse will be more likely to return to their abusers.

Hypothesis Three: Women who exhibit optimistic biases about future abuse will be more likely to return to their abusers.

Hypothesis Four: Women who have experienced greater perceived intermittent relationship reinforcement (infrequent abuse) will be associated with increased likelihood of return.

Exploratory Hypothesis: I hypothesized that returning to an abusive situation would be multiply determined by intermittency of relationship reinforcement, high perceived control over future episodes of abuse, optimistic biases about the outcome of those episodes, and a greater risk-taking behavior. To the extent that perceived control, intermittent relationship reinforcement and optimistic biases increase the likelihood of risk-taking behavior, it is hypothesized that these variables indirectly increase a woman's probability of returning to an abusive relationship through their positive association with risk taking behavior.

## METHOD

### Participants

Data was collected from 71 battered females during weekly empowerment group meetings at domestic violence shelters. Collection sites included The Open Gate, located in Wilmington, NC; Families First, in Whiteville, NC; Hope Harbor, in Leland, NC; Safe Haven, in Burgaw, NC; SAFE, in Lillington, NC; and Haven, in Sanford, NC.

Participants signed informed consent forms and were assigned subject numbers in order to protect their identity and insure privacy.

### Measures

*Demographics Questionnaire (DQ).* The DQ is a 34 item, self-report questionnaire assessing demographic variables and personal history. Examples include level of education, religion, employment status, number of children, socioeconomic

status, and whether or not the woman has been admitted to an emergency room due to head injuries or other injuries sustained as a result of abuse.

*The Revised Conflict Tactics Scale (CTS2) short form.* The CTS2 is a self-report inventory which is used to measure levels of abuse in relationships (Straus, Hamby, McCoy & Sugarman, 1996). The CTS2 is a revised version of the original CTS (Straus, 1979). The new version has additional items which measure sexual coercion and specificity. The CTS2 also has additional items to increase reliability and validity, revised wording for easier clarification, better differentiation between minor and severe levels of abuse, and a new format to simplify administration. Reliability ranges from .79 to .95 (Straus, Hamby, McCoy & Sugarman, 1996). Straus and Douglas (2004) introduced the short form of the CTS2 for time-limited testing situations.

*Control, Attributions and Expectations Questionnaire (CAEQ).* A modified version of the Attributional Style Questionnaire (Peterson & Seligman, 1984) was developed by Clements (1990) to assess perceived control over actual life events, confidence in control perceptions, and expectations of control for future events. Perceived control for each offense and expectations for control over similar episodes are measured. Clements (1990) has demonstrated adequate reliability for this instrument ( $\alpha=0.69$  for control perceptions about positive events and  $\alpha=0.62$  for perceptions about negative events).

*Cognitive Appraisal of Risky Life Events (CARE).* Fromme, Katz, and Rivet created CARE as a modification of the General Risk Appraisal Scale developed by Horvath and Zuckerman (1992) as well as the psychometric paradigm of risk perception (Severson, Hampson, Schrader, & Slovic, 1990). Risk-taking behavior is assessed on

three dimensions: perceived benefits of risky behavior, perceived negative consequences (risk) of risky behavior, and frequency of behavior. Higher numbers indicate greater propensity for risk-taking behavior. Various types of risk behaviors are assessed such as sexual activity, heavy drinking, and illicit drug use.

*Life Orientation Task - Reduced (LOT-R).* The LOT-R is a ten question assessment of dispositional optimism developed by Sheier and Carver (1985). Participants respond to ten statements on zero (strongly disagree) to four (strongly agree) Likert scales with higher numbers indicating greater optimism. LOT items have demonstrated good reliability in many different samples ( $\alpha = .82$ ; Scheier, Carver & Bridges, 1994).

*Relationship Scale (R scale).* The “R” scale was developed by Clements (2003) to assess intermittent relationship reinforcement in abusive relationships. Examples of such behavior are the abusive partner buying gifts for the victim, apologizing, or treating her in a special way after the abuse has occurred. Neutral filler statements are also added. Items are coded on a 0 to 5 scale with higher numbers indicating greater intermittent relationship reinforcement. Clements, Oxtoby and Handsel (2005) found that the R scale intermittent reinforcement items had adequate reliability ( $\alpha=.61$ ). These items were associated with greater abuse severity, suggesting some amount support for the use of this instrument in abuse samples.

*Reasons Return.* The Reasons Return questionnaire was developed by Clements to ascertain factors underlying women’s decision to return to their abusers. The Reasons for Return was included in this study as part of a larger research project that is ongoing. Thus this questionnaire will not be analyzed for this thesis.

*Odds Return.* The Odds Return questionnaire was developed by Clements to determine the likelihood that women will return to their abusers. Items are coded on a 0 to 100 scale in 25 point increments. Some questions assess the likelihood that a woman will return to her abuser if she is not currently living with him, while others assess the likelihood that she will leave if she is currently living with him. Higher scores indicate greater likelihood of returning or leaving.

*Brief COPE (COPE-B).* The COPE-B is a 28 item, self-report inventory based on a four point Likert scale which assesses the extent to which participants use 14 different coping strategies (Carver, 1997). COPE-B subscales contain strategies measured by more extensively used instruments including problem-focused activities, seeking of social support, self-blame and avoidance. The COPE-B also includes strategies not typically measured by other coping instruments, such as humor and denial (Carver, 1997). The COPE-B was included in this study as part of a larger research project that is ongoing. Thus this questionnaire will not be analyzed for this thesis.

#### Procedure

Data was either collected during regularly scheduled group empowerment sessions or packets were left with shelter staff to be filled out during individual counseling sessions. Questionnaires were administered after informed consent was obtained. Each participant filled out all questionnaires which, upon completion, were placed in an envelope with an individual subject number. Data was entered into a Statistical Package for the Social Sciences (SPSS for Windows, Rel. 09.0.1. 2004. Chicago: SPSS Inc.) file and each variable was analyzed.

## RESULTS



## Descriptive Statistics

Participants were obtained from domestic violence shelters in North Carolina (Wilmington shelter, 68%; Burgaw, 13%; Lillington, 13%; Sanford, 4% and Whiteville 3%). The average age for participants was 38 years old. Ethnicity consisted of Caucasian (67%), African American (20%), Hispanic (4%), Multi Racial (3%), Native American (3%), Asian (1%), and Other (1%). More than half of the women (56%) indicated that they were unemployed and of lower socioeconomic status (67%). While over half (52%) indicated that they were married at the time of abuse, 65% reported that they were currently separated or divorced from their partner. Over half of the women (52%) reported that they had experienced over 16 abusive incidents in their lifetime. The top five reasons listed for returning to or remaining with an abusive partner were: 1) love, 2) the desire to give their partner another chance, 3) finances, 4) feeling that their partner needs them, and 5) not wanting to be alone.

Table 1

*Descriptive Statistics for Continuous Demographic Variables*

<u>Variable</u>	<u>Mean</u>	<u>Std. Deviation</u>
Age	38.25	11.07
Number of Marriages	1.23	0.76
Number of Children	2.13	1.20
<u>Level of Education (yrs)</u>	<u>13.16</u>	<u>2.34</u>

Table 2

*Descriptive Statistics for Categorical Demographic Variables*

Variable	N
<hr/>	
Gender	
Female	71
<hr/>	
Ethnicity	
Caucasian	47
African American	14
Hispanic	3
Multi Racial	2
Native American	2
Asian	1
Other	1
<hr/>	
Marital Status at Time of Abuse	
Married	34
Separated or Divorced	13
Dating	5
Cohabiting	13
<hr/>	
Current Marital Status	
Married	14
Separated or Divorced	41
Dating	4
Cohabiting	4
<hr/>	
Religion	
Christian (Other)	25
Catholic	5
Presbyterian	1
Baptist	14
Jewish	1
No Religion Specified	14
<hr/>	
Employment Status	
Employed	30
Unemployed	40
<hr/>	
Abusive Partner	
Husband	46
Boyfriend	13
Other	3
<hr/>	
Shelter Location	
Wilmington, NC	48
Burgaw, NC	9
Lillington, NC	9
Sanford, NC	3
Whiteville, NC	2

Note: Numbers may not add up to cell size due to lack of reporting.

## Analysis

The criterion variable of remaining with an abusive partner was assessed on questions 9, 10, 11, and 12 of the Odds Return questionnaire. Questions 9 and 11 assess odds that women currently living with their partner will leave ( $\alpha=.64$ ), while 10 and 12 assess odds that women not living with their partner will return ( $\alpha=.93$ ). Answers to questions 9-12 were coded into a common metric to assess the likelihood that a woman would leave her abusive partner (odds return). Higher numbers on this common metric indicated greater likelihood a woman would leave the abusive relationship.

## Hypotheses One through Four

An initial correlation matrix was calculated to evaluate the associations between the odds return variable, perceived control, risk-taking subscales, intermittent relationship reinforcement, and optimistic bias. These associations were addressed by Hypotheses One through Four.

## Hypotheses One

The underlying assumption of Hypothesis One was that returning to or remaining with one's abuser is risk-taking behavior. It was hypothesized that higher scores on risk taking measures would be associated with higher probability of return on the odds return variable. This hypothesis was not confirmed. The correlational matrix indicated that risk-taking behavior was not significantly correlated with return to abuser ( $p>.05$ ).

## Hypothesis Two

It was hypothesized that higher perceived control over future events would be associated with higher odds return scores. This hypothesis was not confirmed. The

correlational matrix revealed that perceived control was not significantly correlated with odds return scores ( $p > .05$ ).

#### Hypothesis Three

It was hypothesized that greater optimistic biases about future relationship outcomes would be associated with higher odds return scores. This hypothesis was not confirmed. According to the correlational matrix, optimistic biases are not significantly correlated with the criterion ( $p > .05$ ).

#### Hypothesis Four

It was hypothesized that greater perceived intermittent relationship reinforcement would be associated with higher odds return scores. This hypothesis was not confirmed. The correlational matrix did not indicate that intermittent relationship reinforcement was significantly correlated with odds return scores ( $p > .05$ ).

#### Exploratory Hypothesis

According to the exploratory hypothesis, returning to or remaining in an abusive situation was to be multiply determined by the independent variables. Each independent variable was hypothesized to impact odds return scores. Regression analyses were not conducted for the exploratory hypothesis because none of the independent variables were correlated with odds return scores.

In order to further explore the relation between the independent variables and the criterion, a median split was calculated on the odds return variable. Participants scoring below the 50 percentile were categorized as indicating that they were more likely to remain with or return to their abuser, ( $N=35$ ; odds return = 0 to 6; Group 1). Those

scoring above the 50 percentile were categorized as indicating they were very unlikely to return to or remain with their abuser, (N=32; odds return = 7 to 8; Group 2).

A Multivariate Analyses of Variance (MANOVA) was used to assess potential between group differences on the independent variables. Odds return category was the grouping variable (more likely; Group 1 vs. unlikely; Group 2). No between group differences on any of the independent variables were found at the univariate or multivariate level.

Given the degree to which the data were skewed, the decision was made to repeat the initial correlational matrix for each odds return group. The purpose of these two matrices was to assess the relationship between the independent variables and odds return scores within each odds return group. These two correlation matrices can be seen in Tables 3 and 4.

A hierarchical regression was constructed within each odds return groups to assess the relationship between correlated independent variables and odds return scores. For the odds return group likely to remain with their abuser (Group 1), perceived negative consequences of risky sexual behavior was entered on the first step of the equation and perceived control was entered on the second step. In this regression higher perceived negative consequences of risky sexual behavior (risk-taking) were predictive of higher odds return scores ( $p < .05$ ). Higher perceived control expectations over future abusive episodes also predicted greater reported odds of leaving one's abuser ( $p < .01$ ). Results can be seen in Table 5.

A hierarchical regression assessing the relationship between correlated independent variables and odds return scores was then conducted within odds return

Group 2 (the group indicating they were unlikely to remain with their abuser). Higher perceived benefits of risky sexual behavior were entered on the first step of the regression and intermittent relationship reinforcement was entered on the second step. In this regression higher perceived benefits of risky sexual behavior (risk-taking) were correlated with an increased likelihood of remaining with an abuser ( $p < .05$ ). Although not significant, there was also a trend toward intermittent relationship reinforcement (IRR) as a predictor of return ( $p < .06$ ). Results can be seen in Table 6.

Table 3

*Group 1 Correlations: Risk-Taking, Perceived Control, Optimistic Biases, and IRR*

Variable	1	2	3	4	5	6	7	8
1. Odds Return	—	-.02	.35*	-.04	.27	.26	.47**	.03
2. Perceived Benefit Of Risky Sex	-.02	—	.05	.38	.46	.25	.10	.10
3. Perceived Negative Consequences Of Risky Sex	.35*	.05	—	.05	-.14	.28	.05	-.21
4. Optimistic Bias	-.04	.38	.05	—	-.37	.15	.12	-.40
5. Abuse Severity	.27	.46	-.14	-.37	—	.21	-.30	.68**
6. Perceived Control	.26	.25	.28	.15	.12	—	.00	.23
7. Perceived Control Expectations	.47**	.10	.05	.12	-.30	.04	—	-.43*
8. Intermittent Relationship Reinforcement	.03	-.30	-.21	-.40	.68**	.23	-.43*	—

\*p&lt;.05. \*\*p&lt;.01.



Table 4

*Group 2 Correlations: Risk-Taking, Perceived Control, Optimistic Biases, and IRR*

Variable	1	2	3	4	5	6	7	8
1. Odds Return	___	-.47*	.19	-.13	-.18	-.09	.10	-.34
2. Perceived Benefit Of Risky Sex	-.47*	___	-.14	-.24	-.54**	.23	.12	.27
3. Perceived Negative Consequences Of Risky Sex	.19	-.14	___	-.03	.01	-.09	-.13	.24
4. Optimistic Bias	-.13	-.24	-.03	___	-.09	-.22	-.03	.13
5. Abuse Severity	-.18	-.54**	.01	-.09	___	.09	.13	-.32
6. Perceived Control	-.09	.23	-.09	-.22	.09	___	.00	.01
7. Perceived Control Expectations	.10	.12	-.13	-.03	.13	.00	___	-.20
8. Intermittent Relationship Reinforcement	-.34	.27	.24	.13	-.32	.01	-.20	___

\*p&lt;.05. \*\*p&lt;.01.

Table 5

*Group 1: Summary of Regression Analyses for Variables Predicting Odds of Remaining In an Abusive Relationship*

Variable	$R^2\Delta$	B	SE B	$\beta$
Step 1				
Perceived Negative Consequences of Risky Sexual Activity	0.017	0.04	0.02	0.35*
Step 2				
Perceived Control Expectations	0.013	0.15	0.05	0.45**

\* $p < .05$ . \*\* $p < .01$ .

Table 6

*Group 2: Summary of Regression Analyses for Variables Predicting Odds of Remaining In an Abusive Relationship*

Variable	$R^2\Delta$	B	SE B	$\beta$
Step 1				
Perceived Benefit of Risky Sexual Activity	0.00	-0.04	0.01	-0.47*

\* $p < .05$ .

## DISCUSSION

The purpose of this study was to assess variables that, at least in the theoretical literature, are associated with the decision to remain in an abusive relationship.

Hypothesis one posited that higher scores on risk-taking measures would be correlated with higher probability of remaining with an abusive partner. To my knowledge, this is the first time risk-taking has been measured as a possible correlate of return in abused women. Hypothesis One was not supported. There was no association between CARE subscales and self-reported probability of return.

Further exploration is needed in this area before the notion that risk-taking may be linked to stay/leave decisions is abandoned. It was evident on administration that the CARE-R assessment used to measure risk-taking was lengthy and confusing to some participants. Many women had difficulty with the questions because they appeared to be duplicates when in fact they were assessing risk-taking from different angles. For example, the same set of questions is asked for perceived benefit and perceived negative consequences of risky activities although the titles for the subsections are different. It is possible that some women did not even notice the title change and thus did not answer in the correct manner.

The CARE-R was selected because it included questions about risky sexual behavior, a characteristic that was theorized to be associated with populations of abused women based on an existing body of literature demonstrating that abused women often report poor sexual health (Davis, et al., 2002; Fonck, et al., 2005). Thus this instrument was selected because it sampled a question domain particularly relevant to risk-taking behaviors that are known correlates of abuse. Indeed there was more variability for sexual

health questions than for questions regarding alcohol or drug use, suggesting that these particular items were more sensitive than others. Although the CARE-R itself may be problematic in assessing risk-taking in shelter women, this greater variability provides some support for the notion that sexual behavior may be a fruitful area for further evaluation of the role that risk-taking plays in the maintenance of abusive relationships.

Replies to the substance abuse questions, if they were answered at all, were polarized around the non-risk-taking side of the scale. These questions were problematic for two reasons. First, participants were filling out the surveys while either living in the shelter or at least attending shelter services such as empowerment group or counseling. Substance use is not permitted in the shelter or on shelter office grounds and many court-mandated participants are also not permitted to use illegal substances. For these reasons, the survey data may not accurately reflect the actual level of alcohol or illicit substance usage, as many women may have not answered honestly due to fear of legal repercussions or loss of shelter services.

Second the substance use questions were face valid. Instead of asking women about risk-taking behaviors in such a direct manner, it may be more effective to assess substance use behaviors in a more subtle way. For instance, the Sensation Seeking scale (SSS) may have been more appropriate as items on this scale do not ask participants to report on behaviors that are so obviously socially inappropriate (e.g. mixing drugs and alcohol, CARE-R; as opposed to skiing off a steep slope, SSS) (Zuckerman, 1971). CARE-R responses may have elicited more social desirability issues, as the questions clearly are assessing problematic behaviors and participants may not have wanted to

endorse such behaviors despite the fact that they were told their data would be anonymous.

From this study it is clear that assessing risk-taking among abused women is more complex than initially thought. It may be important to include more widely used risk-taking measures and measure of social conformity in the future to compare the extent to which abused women are subject to social desirability biases versus non-clinical populations. Fromme, et al., (1997) included such a measure in her study of college student risk behaviors and found an association between lower CARE-R scores and social conformity. If abused women exhibit such biases to a greater extent than normative samples it may only be possible to assess risk-taking in this population using behavioral measures or using assessment procedures designed to develop greater rapport such as clinical interviewing (Fromme, et. al., 1997).

#### Hypothesis Two

Higher perceived control over future events was hypothesized to be associated with higher odds return scores. Consistent with Clements & Sawhney (2000), women in this sample showed low perceived control over current abuse, but high expectations over future abusive episodes. Clements and Sawhney (2000) theorized that such a pattern of association would be associated with greater likelihood of return, a speculation that was not supported by these data.

It is important to note that Clements and Sawhney suggested that higher control expectations would be associated with greater likelihood of returning to abuser. They did not speculate on the association between self-report odds of return and perceived control. The pattern of the self-report data clearly indicates that the typical participant was very

unlikely to report that she would return. Thus there is a strong response bias in these data to report low probability of return. It may be important to follow abused women over time to actually test Clements and Sawhney's hypothesis.

It is interesting to note that Clements and Sawhney's assertion was supported in Group 1. These were women who were at least willing to report that there was some possibility that they would return. It might be important to assess characteristics that distinguish this group from the women who reported that there was no possibility that they would return. In this study the two abuse groups did not differ on abuse characteristics or on independent variables of interest. Indeed, it is possible that Group 1 was simply more honest or realistic about their likely future decisions. Given that the majority of abused women do return multiple times even if Group 1 was more forthcoming in their self-reported return odds, it would be important to determine if there were other group distinguishing characteristics.

### Hypothesis Three

Optimistic biases were hypothesized to be correlated with remaining in an abusive relationship. This hypothesis was not supported by the data. It is possible that the sample size was too small to detect an effect. It may also be important to assess optimistic biases that are abuse-specific, as there may be differences between the ways victims view abuse versus other components of their life. The higher control expectancies over future abuse at least support the notion that abused women are optimistic about the future of their relationship.

### Hypothesis Four

Intermittent relationship reinforcement is also rarely studied in this context, but the assessment has been associated with greater abuse severity in past research (Clements, Oxtoby, and Handsel, 2005). In these data there was a trend suggesting that IRR may be correlated with remaining in an abusive relationship. As with optimistic biases it is possible that lack of sufficient power, due to the small sample size, was not enough to detect an effect in the sample as a whole. However, after the median split was performed, it became apparent that IRR was a possible correlate of return for women in Group 2 (those who said they were not likely to go back to their abuser). This is evidence of the need for further exploration of the role IRR plays in the maintenance of abusive relationships.

Mediational analyses were not conducted to address the exploratory hypotheses because of the lack of correlational findings. On examining the data it was apparent that one reason there was a relative dearth of correlations was that there were at least two groups of participants, those who were completely certain they were not going back and those who were less certain. This is why the median split was performed, to allow for further investigation of within group differences on study variables.

When analyses were performed within these groups it was clear that return to abuser was predicted by different factors within each group. For Group 1 greater perceived control over future abuse and greater endorsement of negative consequences of risky sexual behavior predicted lower likelihood of returning to or remaining with ones abuser. Group 1 was the women who reported that they were somewhat likely to return to or remain with their abuser. For Group 2, greater endorsement of items related to the benefits of risky sexual behavior and, possibly, greater intermittent relationship

reinforcement predicted greater odds of returning to or remaining with one's abuser. Group 2 was the women who reported that they were extremely unlikely to return to or remain with the abuser.

Future research should address social conformity issues that may cause participants to indicate that they will never return. Most women do return multiple times and the fact that most women in the sample said they would not indicates at least some pressure to report otherwise. To date, researchers have looked at return as a categorical variable true of all women (Gelles, 1976; Follingstad, et al., 2001). However, this research indicates that some women are more willing to report that they intend to return than others. Moreover it appears that different groups are returning for different reasons. Clinically, it may be important to figure out which variables are most associated with return likelihood. To do this we need to have a much greater understanding of the correlates of abused women's self-reported probability of return. Data from this study suggest that for those indicating they will probably return it may be helpful to assess control expectations over future abuse and negative consequences of risk-taking when conducting intake interviews and in treatment. For those indicating that they are not going to return it may be helpful to assess perceived benefits of high risk behaviors at intake and in treatment.

One alternative theory as to why abused women return has been that the decision may actually be a rational form of risk-taking, wherein the victim decides to remain in a potentially lethal situation for what they deem to be practical reasons. The rational thought processes involved in this type of decision have received some attention in the literature. Strube (1991) attempted to unify several theoretical models, including



psychological entrapment, learned helplessness, exchange theory, within the theory of planned behavior. He postulated that abused women's decision to leave may be influenced by their attitude in regard to the act of leaving, social norms, and their perceived ability to overcome obstacles that would hinder the leaving process. Given this viewpoint, it may be helpful to pursue future research in which victims' stay/leave decisions are explored from this angle.

### Limitations

One limitation of the study was the small sample size. This may have contributed to the fact that the initial correlational matrix did not support the hypotheses. The sample was of ample size in comparison to the literature on abused women, but power was considerably reduced in the within groups analyses. The majority of published studies involving clinical samples of abused women receiving shelter services (as opposed to those using college samples) contain around sixty participants.

This population is difficult to assess because many victims are either reluctant or unable to seek help for their condition, making data collection slow. It is also not easy to assess these women with anything other than self-report measures. Given this, it is possible that desirability issues, as well as the fact that they are filling out the forms in the presence of shelter staff and at empowerment group, may affect the accuracy of the data. For instance, empowerment group encourages women not to return to their abuser, so while they may initially report while in group that they will not return, their ultimate decision may change as the literature suggests that as much as 50% of abused women do go back (Strube, 1988).

It is also quite difficult to track abused women, as their living situations are typically fluid and unstable. For this reason, the criterion variable of remaining with an abuser was only able to be assessed via self-report measure at time of survey administration. In an attempt to verify self-reports, a postcard system was developed for the purpose of this study to ascertain the women's final decision. A pilot group of participants were given a stamped North Carolina postcard with the address of a fictional "friend" written on the back. They were instructed to write either "yes" or "no" on the back of the card, indicating remaining with / returning to the abuser or not, and then drop it in the mail (cards went to a UNCW campus post office box). This proved to be ineffective, as most participants never mailed their cards, a few merely put the card back into the survey envelope, and several women were highly offended. The offended women became upset because they felt that the task insulted their intelligence and honesty. A common complaint was: "Do you think we don't know our own minds?" Thus the practice was not fully implemented for the remainder of the study.

The greatest limitation was the odds return variable. The lack of association between independent and dependent variables was in all likelihood due to this variable. The Odds Return scale was initially developed to allow for more variability in assessing return likelihood by letting participants choose between 0, 25, 75, and 100 percent likelihood instead of "yes" or "no". However, participants tended to reply that they would never return despite the fact that the literature on abused women demonstrates that they do. It may be helpful to assess more sensitive variables such as Odds of Return with clinical interviews in which better rapport is obtained. Ultimately incentivising

longitudinal indices of return may be the most profitable method of acquiring a true picture of these women's residence status post-shelter.

#### Summary and Conclusions

Although causality cannot be determined from the regression analyses, they at least suggest areas of further study. The findings highlight the need for a multi-pronged approach to dealing with the problem of domestic violence and illuminate variables deserving of greater attention. Shelter staff and counselors should be made aware of the role risk-taking behavior and perceived control play in a victim's decision to return or not. One may only hope that recognizing the relationship of these variables to return odds will lead to more effective intervention strategies, paving the way for a future free of domestic violence in which optimistic biases may be truly warranted.

## REFERENCES

- Alloy, L. & Clements, C. (1992). Illusion of control: invulnerability to negative affect and depressive symptoms after laboratory and natural stressors. *Journal of Abnormal Psychology*, 101(2), 234-245.
- Burger, J.M., & Schnerring, D.A. (1982). The effects of desire for control and extrinsic rewards on the illusion of control in gambling. *Motivation and Emotion*, 6, 329-335.
- Bureau of Justice Statistics (BJS) (2003). Available at: URL: [http://www.ojp.usdoj.gov/bjs/cvict\\_c.htm#relate](http://www.ojp.usdoj.gov/bjs/cvict_c.htm#relate).
- Bybee, D. & Sullivan, C.M. (2005). Predicting re-victimization of battered women 3 years after exiting a shelter program. *American Journal of Community Psychology*, 36(1/2), 85-96.
- Centers for Disease Control and Prevention (CDC) (2003). Costs of intimate partner violence against women in the United States. Available at: URL: [www.cdc.gov/ncipc/pub-res/ipv\\_cost/ipv.htm](http://www.cdc.gov/ncipc/pub-res/ipv_cost/ipv.htm).
- Clements, C.M., Ogle, R., Sabourin, C. (2005). Perceived control and emotional status in abusive college student relationships: An exploration of gender differences. *Journal of Interpersonal Violence*, 20(9), 1058-1077.
- Clements, C.M., Oxtoby, C.S., & Handsel, V.A. (2005). The role of intermittent reinforcement in abusive relationships. Poster presented at 2005 ABA conference, Beijing, China.
- Clements, C. M., Sabourin, C., & Spiby, L. (2004). Dysphoria and hopelessness following battering: The role of perceived control, coping and self-esteem. *Journal of Family Violence*, 19(1), 25-36.
- Clements, C.M. & Sawhney, D.K. (2000). Coping with domestic violence: Control attributions, dysphoria, and hopelessness. *Journal of Traumatic Stress*, 13, 219-240.
- Coolidge, F.L., & Anderson, L.W. (2002). Personality profiles of women in multiple Abusive relationships. *Journal of Family Violence*, 17(2), 117-131.
- Crandall, M., Nathens, A., Kernic, M., Holt, V., and Rivara, F. (2004). Predicting future injury among women in abusive relationships. *Journal of Trauma-Injury Infection and Critical Care*, 56(4), 906-912.
- Davis, J.L., Combs-Lane, A.M., Jackson, T.L. (2002). Risky behaviors associated with

- interpersonal victimization. *Journal of Interpersonal Violence*, 17(6), 611-629.
- Dixon, M.R. (2000). Manipulating the illusion of control: Variations in gambling as a function of perceived control over change outcomes. *The Psychological Record*, 50, 705-719.
- Dunn, J.L. (2005). "Victims" and "survivors": Emerging vocabularies of motive for "battered women who stay". *Sociological Inquiry*, 75(1), 1-30.
- Dutton, D. & Painter, S.L. (1981). Traumatic bonding: The development of emotional attachments in battered women and other relationships of intermittent abuse. *Victimology: An International Journal*, 6(1-4), 139-155.
- Follingstad, D.R., Bradley, R.G., Laughlin, J.E., Burke, L. (1999). Risk factors and correlates of dating violence: The Relevance of examining frequency and severity levels in a college sample. *Violence and Victims*, 14(4), 365-380.
- Follingstad, D.R., Hause, E.S., Rutledge, L.L., and Polek, D.S. (1992). Effects of battered women's early responses on later abuse patterns. *Violence and Victims*, 7(2), 109-128.
- Follingstad, D.R., Neckerman, A.P., and Vormbrock, J. (1988). Reactions to victimization and coping strategies of battered women: The ties that bind. *Clinical Psychology Review*, 8, 373-390.
- Follingstad, D.R., Runge, M.M., Ace, A., Buzan, R., and Helff, C. (2001). Justifiability, sympathy level, and internal/external locus of the reasons battered women remain in abusive relationships. *Violence and Victims*, 16(6), 621-644.
- Fonck, K., Els, L., Kidula, N., Ndinya-Achola, J., and Temmerman, M. (2005). Increased risk of HIV in women experiencing physical partner violence in Nairobi, Kenya. *AIDS and Behavior*, 9(3), 335-339.
- Fox, J. & Zawitz, M. (2004). Homicide trends in the United States. Washington (DC): US Department of Justice (USDJOJ). Available from: URL: [www.ojp.usdoj.gov/bjs/homicide/homtrnd.htm](http://www.ojp.usdoj.gov/bjs/homicide/homtrnd.htm)
- Garimella, R., Plichta, S.B., Houseman, C., and Garzon, L. (2000). Physician beliefs about victims of spouse abuse and about the physician role. *Journal of Women's Health & Gender-Based Medicine*, 9(4), 405-411.
- Gelles, R.J. (1976). Abused wives: Why do they stay. *Journal of Marriage and the Family*, 38 (November), 659-668.
- Gelles, R.J. (1997). *Intimate violence in families* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Golding, J.M. (1999). Intimate partner violence as a risk factor for mental disorders: A

- meta-analysis. *Journal of Family Violence*, 14(2), 99-132.
- Gordon, K.C., Burton, S., and Porter, L. (2004). Predicting the intentions of women in domestic violence shelters to return to partners: Does forgiveness play a role? *Journal of Family Psychology*, 18(2), 331-338.
- Heise, L., and Garcia-Moreno, C. (2002). Violence by intimate partners. In: Krug, E., Dahlberg, L., Mercy, J., et al., editors. *World report on violence and health*. Geneva, Switzerland: World Health Organization (WHO), 87–121.
- Helweg-Larsen, M. & Shepperd, J. (2001). Do moderators of the optimistic bias affect personal or target risk estimates? A review of the literature. *Personality and Social Psychology Review*, 5(1), 74-95.
- Herbert, T.B., Silver, R.C., and Ellard, J.H. (1991). Coping with an abusive relationship: How and why do women stay? *Journal of Marriage and the Family*, 53 (May), 311-325.
- Janoff-Bulman, R. & Frieze, I. (1983). A theoretical perspective for understanding reactions to victimization. *Journal of Social Issues*, 39(2), 1-17.
- Johnson, M., and Leone, J. (2005). The differential effects of intimate terrorism and situational couple violence. *Journal of Family Issues*, 26(3), 322–349.
- Leith, K.P., & Baumeister, R.F. (1996). Why do bad moods increase self-defeating behavior: Emotion, risk taking, and self-regulation. *Journal of Personality and Social Psychology*, 71(6), 1250-1267.
- Lloyd S, Taluc N. (1999). The effects of male violence on female employment. *Violence Against Women*, 5, 370–392.
- Martin, A.J., Berenson, K.R., Sascha, G., Sage, R.E., Madry, L., Bingham, L.E., and Primm, B.J. (2000). The process of leaving an abusive relationship: The role of risk assessments and decision-certainty. *Journal of Family Violence*, 15(2), 109-122.
- Martins, S.S., Hermano, T., Sabbatini da Silva Lobo, D., Galetti, A.M., and Gentil, V. (2004). Pathological gambling, gender, and risk-taking behaviors. *Addictive Behaviors*, 29, 1231-1235.
- McFarlane, J., Malecha, A., Gist, J., Watson, K., Batten, E., Hall, I., and Smith, S. (2004). Protection orders and intimate partner violence: An 18-month study of 150 black, hispanic, and white women. *American Journal of Public Health*, 94(4), 613-618.
- McKenna, F.P. & Horswill, M.S. (2006). Risk taking from the participant's perspective:

- The case of driving and accident risk. *Health Psychology*, 25(2), 163-170.
- Myers, D. (1995). Eliminating the battering of women by men: Some conditions for behavior analysis. *Journal of Applied Behavior Analysis*, 28(4), 493-507.
- National Domestic Violence Hotline Report (2005). Available at: URL:  
<http://www.ncdsv.org/images/HotlineReports15PercentIncreaseCallVolume.pdf>
- O'Neill, M.L., & Kerig, P.K. (2000). Attributions of self-blame and perceived control as moderators of adjustment in battered women. *Journal of Interpersonal Violence*, 15(10), 1036-1049.
- Price, P.C., Pentecost, H.C., and Voth, R.D. (2002). Perceived event frequency and the optimistic bias: Evidence for a two-process model of personal risk judgments. *Journal of Experimental Social Psychology*, 38, 242-252.
- Primezone Media Network (2005). Shocking New Statistics on Domestic Violence in U.S. – In Response Americans are Being Urged to Spring Clean with a Conscience by Donating a Phone and Saving a Life. Available at: URL:  
<http://www.ncdsv.org/images/ShockingNewStatisticsDVUS.pdf> .
- Reavis, R. & Overman, W.H. (2001). Adult sex differences on a decision-making task previously shown to depend on the orbital prefrontal cortex. *Behavioral Neuroscience*, 115(1), 196-206.
- Rennison C. (2003). Intimate partner violence, 1993–2001. Bureau of Justice Statistics, Department of Justice (BJS, USDOJ). Publication No. NCJ197838.
- Ronay, R. & Kim, D. (2006). Gender differences in explicit and implicit risk attitudes: A socially facilitated phenomenon. *British Journal of Social Psychology*, 45, 397-419.
- Rosenbloom, T. (2003). Risk evaluation and risky behavior of high and low sensation seekers. *Social Behavior and Personality*, 31(4), 375-386.
- Ross, M., & Glisson, C. (1991). Bias in social work intervention with battered women. *Journal of Social Science and Research*, 14(3/4), 79-104.
- Snyder, D. & Fruchtman, L. (1981). Differential patterns of wife abuse: A data-based typology. *Journal of Consulting and Clinical Psychology*, 49(6), 878-885.
- Stroshine, M.S., & Robinson, A.L. (2003). The decision to end abusive relationships: The role of offender characteristics. *Criminal Justice and Behavior*, 30(1), 97-117.

- Strube, M.J. (1988). The decision to leave an abusive relationship: Empirical evidence and theoretical issues. *Psychological Bulletin*, 104(2), 236-250.
- Strube, M.J. (1991). A rational decision making approach to abusive relationships. *Revista Intercontinental de Psicologi y Educacion*, 4(1), 105-120.
- Strube, M.J. & Barbour, L.S. (1983). The decision to leave an abusive relationship: Economic dependence and Psychological Commitment. *Journal of Marriage and the Family*, 45 (November), 785-793.
- Strube, M.J. & Barbour, L.S. (1984). Factors related to the decision to leave an abusive relationship. *Journal of Marriage and the Family*, (November), 837-844.
- Tjaden, P. & Thoennes, N. (2000a). Extent, nature, and consequences of intimate partner violence: findings from the National Violence Against Women Survey. Washington, D.C.: US Department of Justice. Publication No. NCJ181867. Available from: URL: [www.ojp.usdoj.gov/nij/pubs-sum/181867.htm](http://www.ojp.usdoj.gov/nij/pubs-sum/181867.htm).
- Tjaden, P. & Thoennes, N. (2000b). Full report of the prevalence, incidence, and consequences of violence against women: findings from the National Violence Against Women Survey. Washington, D.C.: US Department of Justice. Publication No. NCJ183781. Available from: URL: [www.ncjrs.org/textfiles1/nij/183781.txt](http://www.ncjrs.org/textfiles1/nij/183781.txt).
- Turner, C., McClure, R., Pirozzo, S. (2004). Injury and risk-taking behavior – a systematic review. *Accident Analysis and Prevention*, 36, 93-101.
- Umberson, D., Anderson, K., Glick, J., Shapiro, A. (1998). Domestic violence, personal control, and gender. *Journal of Marriage and the Family*, 60(2), 442-452.
- U.S. General Accounting Office. (1998). Domestic Violence Prevalence and Implications for Employment Among Welfare Recipients. November.
- Waldrop, A.E., Resick, P.A. (2004). Coping among adult female victims of domestic violence. *Journal of Family Violence*, 19(5), 291-302.
- Walker, L.E. (1999). Psychology and domestic violence around the world. *American Psychologist*, 54, 1, 21-29.
- Walker, L.E. (1989). Psychology and violence against women. *American Psychologist*, 44(4), 695-702.
- Walker, L.E., & Browne, A. (1985). Gender and victimization by intimates. *Journal of Personality*, 53(2), 179-195.



- Walker, L.E. (1977-1978). Battered Women and Learned Helplessness. *Victimology*, 2(3-4), 525-534.
- Weisel, D.L. (2005). Analyzing repeat victimization. Washington, D.C.: US Department of Justice Office of Community Oriented Policing Services. Available from: URL: <http://www.cops.usdoj.gov/mime/open.pdf?Item=1565>.
- Zuckerman, M. (1971). Dimensions of sensation seeking. *Journal of Consulting and Clinical Psychology*, 36(1), 45-52.
- Zuckerman, M. & Kuhlman, D.M. (2000). Personality and risk-taking: Common biosocial factors. *Journal of Personality*, 68(6), 999-102.

## APPENDIX A

### Demographics/History Questionnaire

Please answer the following questions by either filling in the appropriate information or checking the appropriate response.

1. Age\_\_\_\_\_
2. Race/Ethnicity\_\_\_\_\_
3. Religion\_\_\_\_\_
4. Employment status:  
    employed\_\_\_\_\_
- unemployed\_\_\_\_\_
5. Current independent household income\_\_\_\_\_
6. Source of income:  
    abuser\_\_\_\_\_
- government assistance\_\_\_\_\_
- your job\_\_\_\_\_
- your family\_\_\_\_\_
- friends\_\_\_\_\_
7. Current socioeconomic status:  
    upper\_\_\_\_\_
- lower\_\_\_\_\_
8. Marital status (at time of abuse):  
    dating\_\_\_\_\_
- married\_\_\_\_\_
- separated or divorced\_\_\_\_\_
- unmarried but living together\_\_\_\_\_
9. Marital status (now)  
    dating\_\_\_\_\_
- married\_\_\_\_\_
- separated or divorced\_\_\_\_\_
- unmarried but living together\_\_\_\_\_
10. How long was the abusive relationship\_\_\_\_\_
11. Number of marriages\_\_\_\_\_
12. Number of children\_\_\_\_\_
13. History of depression\_\_\_\_\_
14. History of anxiety\_\_\_\_\_
15. Years education \_\_\_\_\_
16. Have you ever experienced physical violence not including rape\_\_\_\_\_
17. For how long\_\_\_\_\_
18. How many incidents of physical abuse have you experienced? \_\_\_\_\_  
    1\_\_\_\_\_ 6-10\_\_\_\_\_
- 2\_\_\_\_\_ 11-15\_\_\_\_\_
- 3-5\_\_\_\_\_ 16+\_\_\_\_\_
19. At what point in the relationship did the abuse begin\_\_\_\_\_

20. Who was your abuser (i.e., husband, boyfriend, other)\_\_\_\_\_
21. What was your most severe injury from the abuse\_\_\_\_\_
22. Did you seek medical attention\_\_\_\_\_
23. Did you feel that medical personnel treated you fairly\_\_\_\_\_
24. Have you sought help for your situation\_\_\_\_\_
25. If yes, whom did you contact (check all that apply)
- |                |                    |                          |
|----------------|--------------------|--------------------------|
| 911_____       | lawyer_____        | employer_____            |
| legal aid_____ | social worker_____ | counselor/therapist_____ |
| friend_____    | family_____        | other_____               |
26. Did your abuser ever hit you in the head\_\_\_\_\_
27. If so, how often\_\_\_\_\_
28. Were you ever knocked unconscious\_\_\_\_\_
29. Have you ever received services from a domestic violence shelter before\_\_\_\_\_
30. How long have you been receiving services at this shelter\_\_\_\_\_
31. Where do you plan on going after you leave shelter services\_\_\_\_\_
32. Are you currently in contact with your abusive partner\_\_\_\_\_
33. If so, how frequently do you talk to him/her\_\_\_\_\_
34. Do you think your abusive partner can change his/her ways\_\_\_\_\_

## APPENDIX B

## R Scale

### Intermittent Reinforcement subscale items only

Please rate on the following scale how well the following statements reflect your current relationship.

0-----1-----2-----3-----4-----5  
Not at all                      Somewhat                      Completely

- \_\_\_\_3. Sometimes the day after my partner hits or yells at me is one of my best days.
- \_\_\_\_5. Although my partner is in charge of the finances sometimes he gives money just to spend on myself.
- \_\_\_\_6. Most of the time my partner does not like me to socialize with others but every once in a while he lets me do as I please.
- \_\_\_\_7. Just when I think I am going to leave, my partner goes and does something extra special for me.
- \_\_\_\_9. There have been times when I was pretty sure my partner was going to abuse me but he did not for some reason.
- \_\_\_\_11. At times I feel like my partner does not even know me but other times I feel like he knows me better than I know myself.
- \_\_\_\_13. The times when my family is happy together make the bad times seem more bearable.
- \_\_\_\_15. When I need something done, my partner will come through for me occasionally.
- \_\_\_\_20. I am usually afraid of what will happen when my partner and I socialize but every once in a while everything seems to go perfectly.
- \_\_\_\_29. My partner is not particularly loving/romantic, but every once in a while he surprises me

## APPENDIX C

### LOT-R

Please indicate the extent of your agreement with each of the items, using the following response format: 0 = *strongly disagree*, 1 = *disagree*, 2 = *neutral*, 3 = *agree*, and 4 = *strongly agree*. Be as accurate and honest as you can throughout, and to try not to let your answers to one question influence answers to other questions. Circle your answers.

1. In uncertain times, I usually expect the best.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

2. It's easy for me to relax.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

3. If something can go wrong for me, it will.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

4. I'm always optimistic about my future.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

5. I enjoy my friends a lot.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

6. It's important for me to keep busy.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

7. I hardly ever expect things to go my way.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

8. I don't get upset too easily.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

9. I rarely count on good things happening to me.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

10. Overall, I expect more good things to happen to me than bad.

strongly disagree	disagree	neutral	agree	strongly agree
0-----	1-----	2-----	3-----	4-----

## APPENDIX D

### CAEQ

Please think of two abusive episodes you have experienced in the past month. One should be the **most abusive** episode you have experienced in the past month. The other should be the **most recent** abusive episode you have experienced (i.e., the one occurring closest to today). If the most recent episode is also the most severely abusive one for you, pick the **next** most abusive episode as your most recent one.

#### I. Most abusive episode

Please think about your **most abusive** episode and answer the following questions about it. Circle the most appropriate number on the scale after each question.

(1) How discouraged did you feel as a result of this abuse?

1-----2-----3-----4-----5-----6		
not at all	somewhat	extremely
discouraged	discouraged	discouraged

(2) How stressful was your experience of this episode?

1-----2-----3-----4-----5-----6		
not at all	somewhat	extremely
stressful	stressful	stressful

(3) To what extent was the occurrence of this episode under your control?

1	2	3	4	5	6
Not at all					Completely
under my					under my
control					control

(4) To what extent did your behavior produce this episode?

1	2	3	4	5	6
Not at all					Completely

(5) How confident are you about your control over this episode?

1	2	3	4	5	6
Totally					Totally
unconfident					confident

(6) In the future, how likely is it that you could avoid the occurrence of episodes similar to this one?

1	2	3	4	5	6
Not at all likely					Extremely likely

(7) In the future, how likely is it that you could avoid the occurrence of abusive episodes in general?

1	2	3	4	5	6
Not at all likely					Extremely likely

(8) Was the cause of this abusive episode due to something about you or something about other people or circumstances?

1	2	3	4	5	6
Totally due to other people or circumstances					Totally due to me

(9) In the future, will the cause of this abuse again be present?

1	2	3	4	5	6
Will never again be present					Will always be present

(10) Is the cause of this abusive episode something that just affects this situation or does it also influence other areas of your life?

1	2	3	4	5	6
Influences just this particular situation					Influences all situations in my life

(11) How important was this abusive episode to you?

1	2	3	4	5	6
Not at all important					Extremely important

## II. Most Recent Abusive Episode

Please think about your most recent abusive episode and answer the following questions about it. Circle the most appropriate number on the scale after each question.

(12) How discouraged did you feel as a result of this abuse?

1-----	2-----	3-----	4-----	5-----	6
not at all		somewhat		extremely	
discouraged		discouraged		discouraged	

(13) How stressful was your experience of this abuse?

1-----	2-----	3-----	4-----	5-----	6
not at all		somewhat		extremely	
stressful		stressful		stressful	

(14) To what extent was the occurrence of this abusive episode under your control?

1	2	3	4	5	6
Not at all					Completely
under my					under my
control					control

(15) To what extent did your behavior produce this episode?

1	2	3	4	5	6
Not at all					Completely

(16) How confident are you about your control over this episode?

1	2	3	4	5	6
Totally					Totally
unconfident					confident

(17) In the future, how likely is it that you could avoid the occurrence of abusive episodes similar to this one?

1	2	3	4	5	6
Not at all					Extremely
likely					likely



(18) In the future, how likely is it that you could avoid the occurrence of abusive episodes in general?

1	2	3	4	5	6
Not at all likely					Extremely likely

(19) Was the cause of this abusive episode due to something about you or something about other people or circumstances?

1	2	3	4	5	6
Totally due to other people or circumstances					Totally due to me

(20) In the future, will the cause of this episode again be present?

1	2	3	4	5	6
Will never again be present					Will always be present

(21) Is the cause of this episode something that just affects this situation or does it also influence other areas of your life?

1	2	3	4	5	6
Influences just this particular situation					Influences all situations in my life

(22) How important was this abusive episode to you?

1	2	3	4	5	6
Not at all important					Extremely important

## APPENDIX E

CARE-R

ID: \_\_\_\_\_

### BENEFIT OF ACTIVITIES

Please complete the following sentence:

A. A regular partner is someone that I have dated for at least \_\_\_\_\_ (specify number) weeks.

Using a scale of 1 (**not at all likely**) to 7 (**extremely likely**), please rate how likely it is that you would experience **some positive consequence** (e.g., experience pleasure, feel good about yourself, spend time with friends) if you engaged in the following activities.

When asked about a regular partner, **use the definition of a regular partner you gave in question A.**

	LIKELIHOOD OF POSITIVE CONSEQUENCES						
	Not at all Likely			Moderately Likely			Extremely Likely
1. Having sex with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
2. Sex without protection against pregnancy with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
3. Sex without protection against sexually transmitted diseases with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
4. Using condoms for sexual intercourse with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
5. Having sexual intercourse while under the influence of alcohol with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
6. Having sexual intercourse while under the influence of drugs other than alcohol with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
7. Sex without a condom with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7

Using a scale of 1 (**not at all likely**) to 7 (**extremely likely**), how likely is it that you would experience **some positive consequence** (e.g., experience pleasure, feel good about yourself, spend time with friends) if you engaged in the following activities?

**LIKELIHOOD OF POSITIVE CONSEQUENCES**

	<b>Not at all Likely</b>		<b>Moderately Likely</b>			<b>Extremely Likely</b>	
8. Sexual monogamy	1	2	3	4	5	6	7
9. Sex with a variety of partners	1	2	3	4	5	6	7
10. Leaving a social event with someone I have just met or do not know well	1	2	3	4	5	6	7
11. Sexual abstinence	1	2	3	4	5	6	7

**IF FEMALE, GO TO QUESTION 12. IF MALE, GO TO QUESTION 17.**

12. Having sexual intercourse because partner uses verbal pressure or threats	1	2	3	4	5	6	7
13. Having sexual intercourse because partner uses physical force	1	2	3	4	5	6	7
14. Being drunk with someone I do not know well	1	2	3	4	5	6	7
15. Having sexual intercourse because partner is too aroused to stop	1	2	3	4	5	6	7
16. Having sexual intercourse because of partner's continual pressure (e.g., threats to end the relationship)	1	2	3	4	5	6	7

**IF FEMALE, GO TO QUESTION 22.**

17. Convincing partner to have sexual intercourse through use of verbal pressure or threats	1	2	3	4	5	6	7
18. Convincing partner to have sexual intercourse through use of physical force	1	2	3	4	5	6	7
19. Making sexual advances toward a drunk date	1	2	3	4	5	6	7
20. Convincing partner to have sexual intercourse because I am too aroused to stop	1	2	3	4	5	6	7
21. Convincing partner to have sexual intercourse through continual pressure (e.g., threats to end the relationship)	1	2	3	4	5	6	7

Continued on Next Page  
2

**RISK OF ACTIVITIES**

Please complete the following sentence:

A. A regular partner is someone that I have dated for at least \_\_\_\_\_ (specify number) weeks.

Using a scale of 1 (**not at all likely**) to 7 (**extremely likely**), please rate how likely it is that you would experience **some negative consequence** (e.g., become sick, be injured, be embarrassed, suffer legal consequences, or feel bad about yourself) if you engaged in the following activities.

When asked about a regular partner, use the definition of a regular partner you gave in question A.

**LIKELIHOOD OF NEGATIVE CONSEQUENCES**

	Not at all Likely		Moderately Likely			Extremely Likely	
1. Having sex with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
2. Sex without protection against pregnancy with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
3. Sex without protection against sexually transmitted diseases with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
4. Using condoms for sexual intercourse with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
5. Having sexual intercourse while under the influence of alcohol with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
6. Having sexual intercourse while under the influence of drugs other than alcohol with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7
7. Sex without a condom with:							
... a regular partner (as defined in A)	1	2	3	4	5	6	7
... someone I just met or do not know well	1	2	3	4	5	6	7

Using a scale of 1 (**not at all likely**) to 7 (**extremely likely**), how likely is it that you would experience **some negative consequence** (e.g., become sick, be injured, be embarrassed, suffer legal consequences, or feel bad about yourself) if you engaged in the following activities?

**LIKELIHOOD OF NEGATIVE CONSEQUENCES**

	Not at all Likely		Moderately Likely			Extremely Likely	
8. Sexual monogamy	1	2	3	4	5	6	7
9. Sex with a variety of partners	1	2	3	4	5	6	7
10. Leaving a social event with someone I have just met or do not know well	1	2	3	4	5	6	7
11. Sexual abstinence	1	2	3	4	5	6	7

**IF FEMALE, GO TO QUESTION 12. IF MALE, GO TO QUESTION 17.**

12. Having sexual intercourse because partner uses verbal pressure or threats	1	2	3	4	5	6	7
13. Having sexual intercourse because partner uses physical force	1	2	3	4	5	6	7
14. Being drunk with someone I do not know well	1	2	3	4	5	6	7
15. Having sexual intercourse because partner is too aroused to stop	1	2	3	4	5	6	7
16. Having sexual intercourse because of partner's continual pressure (e.g., threats to end the relationship)	1	2	3	4	5	6	7

**IF FEMALE, GO TO QUESTION 22.**

17. Convincing partner to have sexual intercourse through use of verbal pressure or threats	1	2	3	4	5	6	7
18. Convincing partner to have sexual intercourse through use of physical force	1	2	3	4	5	6	7
19. Making sexual advances toward a drunk date	1	2	3	4	5	6	7
20. Convincing partner to have sexual intercourse because I am too aroused to stop	1	2	3	4	5	6	7
21. Convincing partner to have sexual intercourse through continual pressure (e.g., threats to end the relationship)	1	2	3	4	5	6	7

Continued on Next Page  
2

(+)

ID: \_\_\_\_\_

Using a scale of 1 (**not at all likely**) to 7 (**extremely likely**), how likely is it that you would experience **some positive consequence** (e.g., experience pleasure, feel good about yourself, spend time with friends) if you engaged in the following activities?

**LIKELIHOOD OF POSITIVE CONSEQUENCES**

	Not at all Likely			Moderately Likely			Extremely Likely
22. Trying/using drugs other than alcohol							
a) Marijuana	1	2	3	4	5	6	7
b) Cocaine	1	2	3	4	5	6	7
c) Hallucinogens	1	2	3	4	5	6	7
d) Amphetamines (speed)	1	2	3	4	5	6	7
e) Inhalants	1	2	3	4	5	6	7
f) Other (specify _____)	1	2	3	4	5	6	7
23. Driving after drinking							
... 1-2 alcoholic drinks	1	2	3	4	5	6	7
... 3-4 alcoholic drinks	1	2	3	4	5	6	7
... 5 or more alcoholic drinks	1	2	3	4	5	6	7
24. Drinking more than 5 alcoholic drinks on one occasion	1	2	3	4	5	6	7
25. Drinking alcohol too quickly	1	2	3	4	5	6	7
26. Mixing drugs and alcohol	1	2	3	4	5	6	7
27. Playing drinking games	1	2	3	4	5	6	7
28. Riding in a car with someone who has consumed alcohol	1	2	3	4	5	6	7

End of Questionnaire



ID: \_\_\_\_\_

Using a scale of 1 (**not at all likely**) to 7 (**extremely likely**), how likely is it that you would experience **some negative consequence** (e.g., become sick, be injured, be embarrassed, suffer legal consequences, or feel bad about yourself) if you engaged in the following activities? \ \ \ \ \

**LIKELIHOOD OF NEGATIVE CONSEQUENCES**

	<b>Not at all Likely</b>		<b>Moderately Likely</b>		<b>Extremely Likely</b>	
22. Trying/using drugs other than alcohol						
a) Marijuana	1	2	3	4	5	6 7
b) Cocaine	1	2	3	4	5	6 7
c) Hallucinogens	1	2	3	4	5	6 7
d) Amphetamines (speed)	1	2	3	4	5	6 7
e) Inhalants	1	2	3	4	5	6 7
f) Other (specify _____)	1	2	3	4	5	6 7
23. Driving after drinking						
... 1-2 alcoholic drinks	1	2	3	4	5	6 7
... 3-4 alcoholic drinks	1	2	3	4	5	6 7
... 5 or more alcoholic drinks	1	2	3	4	5	6 7
24. Drinking more than 5 alcoholic drinks on one occasion	1	2	3	4	5	6 7
25. Drinking alcohol too quickly	1	2	3	4	5	6 7
26. Mixing drugs and alcohol	1	2	3	4	5	6 7
27. Playing drinking games	1	2	3	4	5	6 7
28. Riding in a car with someone who has consumed alcohol	1	2	3	4	5	6 7

End of Questionnaire  
3

## APPENDIX F

### Conflict Tactics Scale

Here is a list of behaviors that many women report that their partners have used. We would like you to estimate how often these behaviors occurred during the past year. Your answers are strictly confidential. CIRCLE the number beside each item that best approximates how often each event happened in your relationship with your partner during the past year.

- 0 = never  
 1 = once  
 2 = twice  
 3 = three to five times  
 4 = six to ten times  
 5 = eleven to twenty times  
 6 = more than twenty times

1. Threatened to hit or throw something at you	0	1	2	3	4	5	6
2. Threw or smashed or hit or kicked something	0	1	2	3	4	5	6
3. Threw something at you	0	1	2	3	4	5	6
4. Scratched you	0	1	2	3	4	5	6
5. Shook you	0	1	2	3	4	5	6
6. Pushed, grabbed or shoved you	0	1	2	3	4	5	6
7. Slapped you	0	1	2	3	4	5	6
8. Punched you	0	1	2	3	4	5	6
9. Kicked, bit or hit you with a fist	0	1	2	3	4	5	6
10. Threw you around	0	1	2	3	4	5	6
11. Hit or tried to hit you with something	0	1	2	3	4	5	6
12. Choked/strangled you	0	1	2	3	4	5	6
13. Beat you up	0	1	2	3	4	5	6
14. Burned you with something	0	1	2	3	4	5	6
15. Threatened you with a knife or gun	0	1	2	3	4	5	6
16. Used a knife or gun on you	0	1	2	3	4	5	6
17. Refused to let you see friends, family, or relatives	0	1	2	3	4	5	6
18. Verbally threatened or intimidated you	0	1	2	3	4	5	6
19. Refused to let you have money for needed expenses	0	1	2	3	4	5	6
20. Forced you to engage in sexual practices against your will	0	1	2	3	4	5	6
21. Refused to allow you to seek							



	psychological or spiritual counseling	0	1	2	3	4	5	6
22.	Verbally ridiculed or demeaned you	0	1	2	3	4	5	6
23.	Intentionally insulted or humiliated you in front of others	0	1	2	3	4	5	6
24.	Denied you access to your paycheck or other forms of money you receive	0	1	2	3	4	5	6
25.	Refused to allow you to socialize with people who are important to you.	0	1	2	3	4	5	6
26.	Did not allow you to use birth control or refused to use birth control when you requested it	0	1	2	3	4	5	6
27.	Refused to allow you out of the house or apartment when you wanted to leave	0	1	2	3	4	5	6
28.	Prevented you from eating or sleeping when you wished to	0	1	2	3	4	5	6
29.	Forced you to engage in sexual activities that you found painful or distasteful	0	1	2	3	4	5	6
30.	Sold or destroyed your personal items	0	1	2	3	4	5	6

## APPENDIX G

### COPE-B

These items deal with the ways you've been coping with any difficulties you might be experiencing. There are many ways to deal with stress. These items ask you to indicate how you cope. Each item says something about a particular way of coping. Please indicate *how frequently* you've been doing what the item says. Don't answer on the basis of whether it seems to be *working* or not, just whether or not you're doing it. Try to rate each item separately from the others. Make your answers as true *for you* as you can.

Please rate the following coping techniques as they relate to **physical abuse:**

*not Sexual!*

- 1 = I haven't been doing this at all  
2 = I've been doing this a little bit  
3 = I've been doing this a medium amount  
4 = I've been doing this alot

1. \_\_\_\_\_ I've been turning to work or other activities to take my mind off things.
2. \_\_\_\_\_ I've been concentrating my efforts on doing something about the situation I'm in.
3. \_\_\_\_\_ I've been saying to myself "this isn't real."
4. \_\_\_\_\_ I've been using alcohol or other drugs to make myself feel better.
5. \_\_\_\_\_ I've been getting emotional support from others.
6. \_\_\_\_\_ I've been giving up trying to deal with it.
7. \_\_\_\_\_ I've been taking action to try to make the situation better.
8. \_\_\_\_\_ I've been refusing to believe that it has happened.
9. \_\_\_\_\_ I've been saying things to let my unpleasant feelings escape.
10. \_\_\_\_\_ I've been getting help and advice from other people.
11. \_\_\_\_\_ I've been using alcohol or other drugs to help me get through it.
12. \_\_\_\_\_ I've been trying to see it in a different light, to make it seem more positive.
13. \_\_\_\_\_ I've been criticizing myself.
14. \_\_\_\_\_ I've been trying to come up with a strategy about what to do.
15. \_\_\_\_\_ I've been getting comfort and understanding from someone.
16. \_\_\_\_\_ I've been giving up the attempt to cope.
17. \_\_\_\_\_ I've been looking for something good in what is happening.
18. \_\_\_\_\_ I've been making jokes about it.
19. \_\_\_\_\_ I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. \_\_\_\_\_ I've been accepting the reality of the fact that it has happened.
21. \_\_\_\_\_ I've been expressing my negative feelings.
22. \_\_\_\_\_ I've been trying to find comfort in my religion or spiritual beliefs.
23. \_\_\_\_\_ I've been trying to get advice or help from other people about what to do.
24. \_\_\_\_\_ I've been learning to live with it.
25. \_\_\_\_\_ I've been thinking hard about what steps to take.
26. \_\_\_\_\_ I've been blaming myself for things that happened.
27. \_\_\_\_\_ I've been praying or meditating.
28. \_\_\_\_\_ I've been making fun of the situation.

## APPENDIX H

### REASONS RETURN

If you **were** to return to your partner, what factors would make you return? Please choose the top 5 reasons why you would return. We are not asking whether you are going to return, but why you would return if you did. **Place a checkmark beside the top 5 reasons.**

1. \_\_\_\_ Difficulties with finances
2. \_\_\_\_ I want a father for my children
3. \_\_\_\_ Difficulties with transportation
4. \_\_\_\_ I still love my partner
5. \_\_\_\_ Difficulties with medical insurance
6. \_\_\_\_ I want to give my partner another chance
7. \_\_\_\_ I believe that my partner has changed
8. \_\_\_\_ I have no where else to go once I leave the shelter
9. \_\_\_\_ My children miss my partner
10. \_\_\_\_ Difficulties with my health
11. \_\_\_\_ I don't want to be alone
12. \_\_\_\_ Difficulties finding employment
13. \_\_\_\_ Religious beliefs
14. \_\_\_\_ Pressure from my family and friends
15. \_\_\_\_ I fear the abuse will get worse if I don't return
16. \_\_\_\_ My partner threatened my life if I don't return
17. \_\_\_\_ My partner has threatened to take my children away from me/report me to DSS if I  
don't return
18. \_\_\_\_ My partner pressures me to return
19. \_\_\_\_ My partner needs me
20. \_\_\_\_ I have no one to watch my children when I am unable to

21. \_\_\_\_ I'm pregnant by my partner
22. \_\_\_\_ I'm too embarrassed to admit failure in my relationship with my partner
23. \_\_\_\_ I have to return because of legal difficulties.

Please rank the five reasons you would choose to return to your partner. Number 1 is the most important reason. Number 5 is the least important reason. **Put the reason number next to your importance rating.**

<u>Importance Rating</u>	<u>Reason Number</u>
1 (most important)	_____
2	_____
3	_____
4	_____
5 (least important)	_____

## APPENDIX I

### ODDS RETURN

- 1) If, in the past, you have left your partner, have you ever returned to them?  
\_\_\_\_\_Yes \_\_\_\_\_No
  - 2) If so, how many times have you returned to your partner? \_\_\_\_\_ times
  - 3) What is the longest period of time you have stayed away from your partner?  
\_\_\_\_\_(days, weeks, or months)
  - 4) How many times have you contacted a domestic violence shelter as a result of abuse?  
\_\_\_\_\_ times
  - 5) How many times have you stayed at a domestic violence shelter? \_\_\_\_\_ times
  - 6) Are you currently living with your partner? \_\_\_\_\_Yes \_\_\_\_\_No
  - 7) How many times do you think the average woman returns to her partner before she leaves him for good? \_\_\_\_\_ times
- 

- 8) If you are living with your partner, what are the odds you will leave him sometime in the next year?

0-----25-----50-----75-----100  
I will never leave I will definitely leave

- 9) If you aren't living with your partner, what are the odds that you will return to him in the next year?

0-----25-----50-----75-----100  
I will never return I will definitely return

- 10) If you are living with your partner, what are the odds you will leave him?

0-----25-----50-----75-----100  
I will never leave I will definitely leave

11) If you aren't living with your partner, what are the odds that you will return to him?

0-----25-----50-----75-----100  
I will never return I will definitely return

12) What would you think the average woman in this shelter would say about returning to their partner?

0-----25-----50-----75-----100  
They will never return They will definitely return

13) What do you think the staff at this shelter would say about the chance of you returning to your partner?

0-----25-----50-----75-----100  
They would say I will never return They would say I will definitely return